

I. IN THE CLAIMS:

Claims 1 - 44 (previously cancelled).

45. (PRESENTLY AMENDED) A kit for generating a perioperative genomic profile for a subject, comprising:

- a) reagents capable of detecting which detect the presence of variant alleles of two or more genes selected from the group consisting of *BChe*, *CYP2D6*, *F5*, *F2*, *CACNAIS*, *MTHFR*, *MTR*, *MTRR*, *CBS*, *TNF α* and *TNF β* ; and
- b) instructions for using said kit for generating said perioperative genomic profile for said subject.

46. (PRESENTLY AMENDED) The kit of Claim 45, further comprising a computer readable medium comprising instructions for using said kit for generating said perioperative genomic profile for said subject.

47. (PRESENTLY AMENDED) The kit of Claim 46, further comprising a computer readable medium comprising computer instructions which direct a processor to analyze data derived from use of said reagents.

48. (PRESENTLY AMENDED) The kit of Claim 45, wherein said instructions comprise a decision tree information to optimize perioperative care that, based on at least the presence of variant alleles of two or more genes selected from the group consisting of *BChe*, *CYP2D6*, *F5*, *F2*, *CACNAIS*, *MTHFR*, *MTR*, *MTRR*, *CBS*, *TNF α* and *TNF β* , directs a user to a specific perioperative clinical pathway for said subject.

49. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in selecting an appropriate general anesthesia treatment course of action.

50. (PREVIOUSLY ADDED) The kit of Claim 49, wherein said general anesthesia is an inhalational treatment course of action.

51. (PREVIOUSLY ADDED) The kit of Claim 49, wherein said general anesthesia is an intravenous treatment course of action.

52. (PREVIOUSLY ADDED) The kit of Claim 49, wherein said general anesthesia is a combined inhalational and intravenous treatment course of action.

53. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in selecting an appropriate regional anesthesia treatment course of action.

54. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in selecting an appropriate combined regional and general treatment course of action.

55. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in selecting an appropriate non-invasive surgery treatment course of action.

56. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in selecting an appropriate invasive surgery treatment course of action.

57. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in selecting an appropriate anesthesia treatment course of action during a medical procedure.

58. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions

describe how said perioperative genomic profile is analyzed in selecting appropriate dosages of analgesic compounds.

59. (PREVIOUSLY ADDED) The kit of Claim 54, wherein said instructions describe how said perioperative genomic profile is analyzed to increase the dosage of analgesic compounds metabolized by CYP2D6.

60. (PREVIOUSLY ADDED) The kit of Claim 54, wherein said instructions describe how said perioperative genomic profile is analyzed to decrease the dosage of analgesic compounds metabolized by CYP2D6.

61. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in selecting appropriate prophylaxis for thrombosis.

62. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed to increase prophylaxis for thrombosis mediated by variant alleles of *F5*, *F2*, *MTHFR*, *MTR*, *MTRR*, and *CBS*.

63. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed to decrease prophylaxis for thrombosis mediated by variant alleles of *F5*, *F2*, *MTHFR*, *MTR*, *MTRR*, and *CBS*.

64. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in selecting appropriate monitoring procedures.

65. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in selecting pre-operative phenotypic tests and consultations.

66. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in providing a prognosis after an anesthesia treatment course of action.

67. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in providing a prognosis after a surgical treatment course of action.

68. (PREVIOUSLY ADDED) The kit of Claim 45, wherein said instructions describe how said perioperative genomic profile is analyzed in selecting an appropriate post-operative treatment course of action.

69. (PRESENTLY CANCELLED)

70. (PRESENTLY CANCELLED)

71. (PRESENTLY AMENDED) A perioperative genomic profile kit having component parts ~~capable of being assembled for detecting which detect~~ the presence of variant alleles of two or more genes selected from the group consisting of *BChE*, *CYP2D6*, *F5*, *F2*, *CACNAIS*, *MTHFR*, *MTR*, *MTRR*, *CBS*, *TNF α* and *TNF β* in a subject and thereby providing a subject-specific clinical pathway for said subject, comprising a decision-tree-~~information to optimize perioperative care~~ that, based at least on the presence or absence of variant alleles of two or more genes selected from the group consisting of *BChE*, *CYP2D6*, *F5*, *F2*, *CACNAIS*, *MTHFR*, *MTR*, *MTRR*, *CBS*, *TNF α* and *TNF β* measured by said kit, directs a user to a specific clinical pathway of medical intervention for said subject.

REMARKS

Claims 1-23 were filed in the original case. Claims 1-23 were cancelled and Claims 24-44 were added in a previous amendment. Claims 24-44 were cancelled and Claims 45-71